DOCUMENT RESUME

ED 383 976 CG 026 270

AUTHOR Powers, Stephen; And Others
TITLE Family Cohesion and Conflict in a Substance Abuse Prevention Program.
PUB DATE Nov 94
NOTE 7p.; Paper presented at the Annual Meeting of the American Evaluation Association (Boston, MA, November 2-5, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Conflict; Counseling Effectiveness; *Family Counseling; *Family Programs; Interpersonal Communication; *Outcomes of Treatment; Prevention; *Program Evaluation; *Substance Abuse
IDENTIFIERS *Family Communication; Family Intervention; *Pasos Adelante AZ

ABSTRACT

The Pasos Adelante Project is a substance abuse prevention program in Tucson, Arizona. This study looked at changes in family cohesion, family expression, and family conflict as a result of participation in this program at three different agencies. The analyses showed that differences in gains in family expression and reduction in family conflict distinguished groups of parents participating at different sites. One agency (which served clients from a higher socioeconomic status) appeared to have the largest reported gains in family expression and largest reduction in family conflict. (JE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 383 976

FAMILY COHESION AND CONFLICT IN A SUBSTANCE ABUSE PREVENTION PROGRAM

Stephen Powers
Creative Research Associates, Inc.

Ricardo Duran
University of Arizona - Tucson

Anne Reynolds
Tucson Unified School District, Arizona

Tangie Villaescusa
University of Arizona - Tucson

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
S. POWERS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at the Annual Meeting of the American Evaluation Association in Boston, November 2-5, 1994. The authors would like to thank Mr. Eladio Perez, Project Officer of the Center for Substance Abuse Prevention for his support of this research, and Dr. Christine Miller, Pasos Adelante Project Director, for her consistent support and commitment to quality evaluation.

CG026270

BEST COPY AVAILABLE

FAMILY COHESION AND CONFLICT IN A SUBSTANCE ABUSE PREVENTION PROGRAM

Background. The evaluation of the Pasos Adelante Project at the La Frontera Hope Center, CODAC Behavioral Health Center, and the Tucson Council on Alcohol and Drug Dependence (all of Tucson, Arizona) were involved the pre- and posttesting of parents who were substance abusers and their 3-5 year old children. The program and evaluation was funded by the Center for Substance Abuse Prevention (CSAP). Parents were tested with the Family Environment Scale, and the children were tested with the Denver II a revised form of the Denver Developmental Screening Test. Tests were administered by trained testers of Creative Research Associates (CRA), and they were independent of the La Frontera Center. Bilingual testers were available for parents or children who did not speak English comfortably. June 1, 1994 ended the third year of a five-year project.

Program. The Pasos Adelante Project was implemented in three separate agencies in the Tucson area. They are designated Agency 1, Agency 2, Agency 3. for this study. Agencies 1 and 2 served parents and children of a similar background. Agency 3 clients differed from the other agencies because its parents and children came from a higher socioeconomic status.

The Pasos Adelante Project was implemented in 12-week cycles with pre- and posttesting of parents and children before and after each cycle.

Sample/Instrument.

Parents. A total of 85 parents were involved in the present analysis. Parents were administered the Family Cohesion, Family Expression, and Family Conflict scales of the Family Environment Scale (Moos and Moos, 1986). Each scale consisted of 9 items which were summed to obtain a score on the family variable. The results represent parent self-reported perceptions of their family cohesion, expression, and conflict.

Children. A total of 76 children, ages 3-5, were also involved in this project. Children were administered the Social, Fine Motor, Language, and Gross Motor Scales of the Denver II (Frankenburg and Dodds, 1990).

Research Questions

1. Are there differences in the gains (or losses) in Family Cohesion, Family Expression, and Family Conflict at the three agencies?

2. What is the nature of the gains(or losses) in Family Cohesion, Family Expression, and Family Conflict in the three agencies?

3. What is a statistical ordering of the set of predictor post-pretest differences as predictors of group differences of the three agencies.?

RESULTS

The pretest and posttest results of the three agencies are presented in Appendix A.

The null hypothesis is presented below. It hypothesizes that the differences between the pretest and the posttest means in the population are equal.

$$H_0: \begin{bmatrix} \delta_{11} \\ \delta_{21} \\ \delta_{31} \end{bmatrix} = \begin{bmatrix} \delta_{12} \\ \delta_{22} \\ \delta_{32} \end{bmatrix} = \begin{bmatrix} \delta_{13} \\ \delta_{23} \\ \delta_{33} \end{bmatrix}$$

where $\delta_{ij} = \mu_{ij2} - \mu_{ij1}$, i = 1,2,3 indicate the family characteristics (1 = Family Cohesion, 2 = Family Expression, and 3 = Family Conflict), j = 1,2,3, indicate the three agencies. There is a mean vector of differences for each of the three agencies.

Multivariate Analysis of Variance

Wilk's lambda showed that there was a significant difference among the three mean vectors, $\Lambda = .82$, $F(6,158) = 2.81$, $p = .013$

Table 1 showed that there were significant differences in the gains in family expression and significant differences in the reductions in family conflict. Comparisons of the mean differences of the three agencies using univariate F tests indicated that there were significant differences among the gains in Family Expression $F(2,82)=3.50$, $p = .035$, and significant differences in the amount of reduction in Family Conflict $F(2,82)=4.12$, $p = .020$.

It appeared that the gains made in Family Expression and the reduction made in Family Conflict in Agency 3 were significantly different from the other two agencies.

Table 1
Mean Differences Among the Three Agencies

		Agencies				
Family	n	1	2	3	F	p
Cohesion	37	.19	1.00	.73	2.64	.077
Expression	22	-.09	.05	.86	3.50	.035
Conflict	26	.16	-.50	-1.19	4.12	.020

Discriminant Analysis

For this study it was theoretically possible to extract two discriminant functions. Only one discriminant function was statistically significant, and was extracted from the data, $\chi^2(6) = 16.21$, $p = .0127$. In the formula the X's represent the post-pretest differences of the three family variables. Thus, the discriminant functions tell us if the differences from pretest to posttest are statistically useful in discriminating between the parents at the three agencies:

The functions were:

Raw Score Discriminant Functions:

$$Y_1 = -.032X_1 - .430X_2 + .416X_3$$

Standardized Discriminant Functions:

$$Y_1^* = -.044X_1^* - .627X_2^* + .701X_3^*$$

The standardized discriminant functions suggest to us which of the three family characteristics had differences useful in discriminating among the three groups. Family Expression (-.627) and Family Conflict (.701) appeared to have similar importance in discriminating among the three groups.

To further examine the importance of differences in the discrimination of the three groups, a stepwise discriminant analysis was used using the criterion of F-to-remove. With all variables in the analysis,

Step 1; Family Conflict was first to be removed $F(2,81)=4.12$, $p = .020$ at Step 1.

Step 2, Removed at Step 2 was Family Expression, $F(4,160)=3.36$, $p = .011$,

Step 3, and finally removed at Step 3 was Family Cohesion, $F(6,158)=2.81$, $p = .013$.

Discussion:

These analyses showed that differences in gains in Family Expression and reduction in Family Conflict distinguished three groups of parents participating in the Pasos Adelante Project at three different agencies. Agency 3 appeared to have largest reported gains in Family Expression and largest reduction in Family Conflict. This indicate that two of the important objectives of the program were having an effect in Agency 3.

REFERENCES

Frankenburg, W., and Dodds, J. (1990). Denver II Screening Manual. Denver, Denver Developmental Materials.

Moos, R.H., and Moos, B.S. (1986). Family Environment Scale Manual (2nd ed.). Palo Alto: CA, Consulting Psychologists Press.

ABOUT THE AUTHORS

Stephen Powers, Ph.D.(Education) is President of Creative Research Associates, Inc., and an Adjunct Professor of Educational Psychology at the University of Arizona - Tucson. His address is 2235 North Madelyn Avenue, Tucson, Arizona 85712.

Ricardo Duran is a Ph.D. student (Educational Psychology) at the University of Arizona - Tucson.

Anne Reynolds, Ph.D.(Anthropology) is a Research Evaluator with the Tucson Unified School District.

Tangie Villaescusa, M.A. (Educational Psychology) is a Graduate Student in Educational Psychology at the University of Arizona - Tucson.

APPENDIX A

Table 1
Pretest Means for Parents Responses

	Agency				
Family	1	2	3	F	p
Cohesion	7.16	6.32	6.58	1.00	.373
Expression	6.22	5.59	5.54	1.24	.294
Conflict	3.62	4.36	4.31	1.00	.371

n_1=37, n_2=22, n_3=26.

Table 2
Posttest Means for Parents Responses

	Agency				
Family	1	2	3	F	p
Cohesion	7.35	7.32	7.31	.004	.996
Expression	6.13	5.64	6.40	1.13	.329
Conflict	3.78	3.86	3.12	.88	.420

n_1=37, n_2=22, n_3=26